

## Patent Assignment Abstract of Title

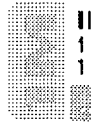
**Total Assignments: 1****Application #:** 10603593 **Filing Dt:** 06/25/2003**Patent #:** NONE**Issue Dt:****PCT #:** NONE**Publication #:** NONE**Pub Dt:****Inventor:** Yogesh Swami**Title:** System and method for optimizing link throughput in response to non-congestion-related packet loss**Assignment: 1****Reel/Frame:** 014526/0654**Received:**  
09/30/2003**Recorded:**  
09/26/2003**Mailed:**  
04/23/2004**Pages:**  
3**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).**Assignor:** SWAMI, YOGESH**Exec Dt:** 07/30/2003**Assignee:** NOKIA CORPORATION  
KEILALAHDENTIE 4  
FIN-02150 ESPOO, FINLAND**Correspondent:** CRAWFORD MAUNU PLLC  
STEVEN R. FUNK  
1270 NORTHLAND DRIVE, SUITE 390  
ST. PAUL, MN 55120

Search Results as of: 10/29/2004 10:02:38 A.M.

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**1 A comparison of mechanisms for improving TCP performance over wireless links**
*Balakrishnan, H.; Padmanabhan, V.N.; Seshan, S.; Katz, R.H.;*  
 Networking, IEEE/ACM Transactions on , Volume: 5 , Issue: 6 , Dec. 1997  
 Pages:756 - 769

[\[Abstract\]](#)   [\[PDF Full-Text \(368 KB\)\]](#)   IEEE JNL

**2 Delay performance of the new explicit loss notification TCP technique in wireless networks**
*Wenqing Ding; Jamalipour, A.;*  
 Global Telecommunications Conference, 2001. GLOBECOM '01. IEEE , Volume: 6 , 25-29 Nov. 2001  
 Pages:3483 - 3487 vol.6

[\[Abstract\]](#)   [\[PDF Full-Text \(246 KB\)\]](#)   IEEE CNF

**3 PET: enhancing TCP performance over 3G & beyond networks**
*Li, V.H.; Zhi-Qiang Liu;*  
 Vehicular Technology Conference, 2003. VTC 2003-Fall. 2003 IEEE 58th , Volu 4 , 6-9 Oct. 2003  
 Pages:2302 - 2306 Vol.4

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☐ Check to search within this result set**Results Key:****JNL** = Journal or Magazine   **CNF** = Conference   **STD** = Standard**1 Stutter XOR strategies: a new class of multicopy ARQ strategies***Aghadavoodi Jolfaei, M.;*

Network Protocols, 1994. Proceedings., 1994 International Conference on , 25 Oct. 1994

Pages:56 - 62

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### Search Results -

Term	Documents
THROUGHPUT	81980
THROUGHPUTS	3943
(41 AND THROUGHPUT).USPT.	4
(L41 AND THROUGHPUT ).USPT.	4

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L42

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side by side

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result set

<u>L42</u>	L41 and throughput	4	<u>L42</u>
<u>L41</u>	L40 and bit and error	5	<u>L41</u>
<u>L40</u>	L39 and congestion	7	<u>L40</u>
<u>L39</u>	packet adj loss and recovery adj procedure	30	<u>L39</u>
<u>L38</u>	non-congestion and packet adj loss	8	<u>L38</u>
<u>L37</u>	first adj recovery and second adj recovery and packet adj loss	0	<u>L37</u>
<u>L36</u>	L35 and recovery	3	<u>L36</u>
<u>L35</u>	L34 and congestion	6	<u>L35</u>
<u>L34</u>	packet adj loss adj bit	13	<u>L34</u>
<u>L33</u>	L32	3	<u>L33</u>
<u>L32</u>	L30 and bit adj error	3	<u>L32</u>

<u>L31</u>	L30 and error adj bit	0	<u>L31</u>
<u>L30</u>	L27 and recovery	5	<u>L30</u>
<u>L29</u>	L27 and loss adj recovery	0	<u>L29</u>
<u>L28</u>	noncongestion and packet adj loss	1	<u>L28</u>
<u>L27</u>	non-congestion and packet adj loss	8	<u>L27</u>
<u>L26</u>	L25 and increase adj throughput	1	<u>L26</u>
<u>L25</u>	L24 and throughput	18	<u>L25</u>
<u>L24</u>	L23 and congestion	30	<u>L24</u>
<u>L23</u>	loss adj recovery and packet adj loss	68	<u>L23</u>
<u>L22</u>	first adj loss adj recovery and second adj loss adj recovery	0	<u>L22</u>
<u>L21</u>	L9 and packet adj loss adj bit	10	<u>L21</u>
<u>L20</u>	L16 and recovery	2	<u>L20</u>
<u>L19</u>	L16 and identification	1	<u>L19</u>
<u>L18</u>	L16 and non-congested	0	<u>L18</u>
<u>L17</u>	L16 and non-congestion	0	<u>L17</u>
<u>L16</u>	L15 and congestion	2	<u>L16</u>
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<u>L11</u>	L10 and recovery	68	<u>L11</u>
<u>L10</u>	L9 and congestion	111	<u>L10</u>
<u>L9</u>	packet adj loss and bit adj errors	282	<u>L9</u>
<u>L8</u>	PLB and packet adj loss	0	<u>L8</u>
<u>L7</u>	L6 and PLB	0	<u>L7</u>
<u>L6</u>	l2 and packet adj loss	44	<u>L6</u>
<u>L5</u>	L2 and non-congested	1	<u>L5</u>
<u>L4</u>	L2 and noncongestion	0	<u>L4</u>
<u>L3</u>	L2 and non-congestion	0	<u>L3</u>
<u>L2</u>	increase adj throughput	6199	<u>L2</u>
<u>L1</u>	optimizing adj link adj throughput	0	<u>L1</u>

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BIT	283910
BITS	194973
ERROR	332363
ERRORS	185143
(30 AND (BIT ADJ ERROR)).USPT.	3
(L30 AND BIT ADJ ERROR ).USPT.	3

Database:

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<u>L32</u>	L30 and bit adj error
<u>L31</u>	L30 and error adj bit
<u>L30</u>	L27 and recovery
<u>L29</u>	L27 and loss adj recovery
<u>L28</u>	noncongestion and packet adj loss
<u>L27</u>	non-congestion and packet adj loss
<u>L26</u>	L25 and increase adj throughput
<u>L25</u>	L24 and throughput
<u>L24</u>	L23 and congestion

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0	<u>L31</u>
5	<u>L30</u>
0	<u>L29</u>
1	<u>L28</u>
8	<u>L27</u>
1	<u>L26</u>
18	<u>L25</u>
30	<u>L24</u>

<u>L23</u>	loss adj recovery and packet adj loss	68	<u>L23</u>
<u>L22</u>	first adj loss adj recovery and second adj loss adj recovery	0	<u>L22</u>
<u>L21</u>	L9 and packet adj loss adj bit	10	<u>L21</u>
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<u>L19</u>	L16 and identification	1	<u>L19</u>
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<u>L14</u>	L13 and increase adj throughput	11	<u>L14</u>
<u>L13</u>	370/229.ccls.	445	<u>L13</u>
<u>L12</u>	L11 and increase adj throughput	1	<u>L12</u>
<u>L11</u>	L10 and recovery	68	<u>L11</u>
<u>L10</u>	L9 and congestion	111	<u>L10</u>
<u>L9</u>	packet adj loss and bit adj errors	282	<u>L9</u>
<u>L8</u>	PLB and packet adj loss	0	<u>L8</u>
<u>L7</u>	L6 and PLB	0	<u>L7</u>
<u>L6</u>	l2 and packet adj loss	44	<u>L6</u>
<u>L5</u>	L2 and non-congested	1	<u>L5</u>
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<u>L2</u>	increase adj throughput	6199	<u>L2</u>
<u>L1</u>	optimizing adj link adj throughput	0	<u>L1</u>

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Term	Documents
NULL	40672
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(L47 AND NULL ).USPT.	1

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<u>L48</u>	L47 and null
<u>L47</u>	L12 and zero
<u>L46</u>	l12 and empty
<u>L45</u>	L44
<u>L44</u>	L43
<u>L43</u>	empty adj packet adj loss
<u>L42</u>	L41 and throughput
<u>L41</u>	L40 and bit and error
<u>L40</u>	L39 and congestion
<u>L39</u>	packet adj loss and recovery adj procedure
<u>L38</u>	non-congestion and packet adj loss

**Hit Count Set Name**

result set

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1	<u>L47</u>
0	<u>L46</u>
0	<u>L45</u>
0	<u>L44</u>
0	<u>L43</u>
4	<u>L42</u>
5	<u>L41</u>
7	<u>L40</u>
30	<u>L39</u>
8	<u>L38</u>



<u>L37</u>	first adj recovery and second adj recovery and packet adj loss	0	<u>L37</u>
<u>L36</u>	L35 and recovery	3	<u>L36</u>
<u>L35</u>	L34 and congestion	6	<u>L35</u>
<u>L34</u>	packet adj loss adj bit	13	<u>L34</u>
<u>L33</u>	L32	3	<u>L33</u>
<u>L32</u>	L30 and bit adj error	3	<u>L32</u>
<u>L31</u>	L30 and error adj bit	0	<u>L31</u>
<u>L30</u>	L27 and recovery	5	<u>L30</u>
<u>L29</u>	L27 and loss adj recovery	0	<u>L29</u>
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<u>L13</u>	370/229.ccls.	445	<u>L13</u>
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<u>L11</u>	L10 and recovery	68	<u>L11</u>
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<u>L1</u>	optimizing adj link adj throughput	0	<u>L1</u>

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☐ 1. Document ID: US 6370114 B1

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File: USPT

Apr 9, 2002

US-PAT-NO: 6370114

DOCUMENT-IDENTIFIER: US 6370114 B1

**\*\* See image for Certificate of Correction \*\***TITLE: Apparatus and method for optimizing congestion control information in a multi-protocol network

DATE-ISSUED: April 9, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gullicksen; Jeffrey T.	Santa Clara	CA		
Bernstein; Greg M.	Fremont	CA		
Chhabra; Gurpreet S.	Sunnyvale	CA		

US-CL-CURRENT: 370/229; 370/230, 370/395.52

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWC	Draw D
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☐ 2. Document ID: US 5912878 A

L20: Entry 2 of 2

File: USPT

Jun 15, 1999

US-PAT-NO: 5912878

DOCUMENT-IDENTIFIER: US 5912878 A

TITLE: Method and end station with improved user reponse time in a mobile network

DATE-ISSUED: June 15, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Park; Sung-Woo	Vancouver			CA
Andjelic; Dragan	Vancouver			CA
Maini; Viji	Delta			CA

US-CL-CURRENT: 370/229; 370/232, 455/427

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstracts	Claims	KWIC	Drawings
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Term	Documents
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RECOVERIES	4866
RECOVERYS	4
(16 AND RECOVERY).USPT.	2
(L16 AND RECOVERY ).USPT.	2

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L12: Entry 1 of 1

File: USPT

May 4, 2004

US-PAT-NO: 6732314

DOCUMENT-IDENTIFIER: US 6732314 B1

TITLE: Method and apparatus for L2TP forward error correction

DATE-ISSUED: May 4, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Borella; Michael S.	Naperville	IL		
Schuster; Guido	Des Plaines	IL		
Sidhu; Ikhlq S.	Vernon Hills	IL		
Mahler; Jerry	Prospect Heights	IL		

US-CL-CURRENT: 714/752; 714/776

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Draw D
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INCREASES	840393
THROUGHPUT	81980
THROUGHPUTS	3943
(11 AND (INCREASE ADJ THROUGHPUT)).USPT.	1
(L11 AND INCREASE ADJ THROUGHPUT ).USPT.	1

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